Implementing Curricula In Saskatchewan: THE ROLE OF THE PRINCIPAL

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Implementing curricula in Saskatchewan: The role of the principal

A report submitted to the Curriculum Review Committee, Province of Saskatchewan

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Abstract

During March 1982, a representative sample of twenty-one Saskatchewan school principals was interviewed about the task of implementing curricula in schools. The principals reported marked differences in the extent of school success in curriculum implementation depending on whether the curriculum had been developed at the provincial level or at the local level. The findings suggest that clarification of the tasks and responsibilities of Saskatchewan school principals in terms of curriculum implementation is urgently needed. The findings also suggest that the study of curriculum theory and implementation is an important component in preparation programs and continuing education programs for school administrators.

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A further acknowledgment is extended to the 1982 Saskatchewan Curriculum and Instructional Review Committee who provided the financial support for this study.

We hope that this document will provide useful information to this committee for curriculum planning, development and implementation in the Province of Saskatchewan.

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Introduction

Background

In late 1981, the Department of Education of the Province of Saskatchewan established a Curriculum and Instruction Review. The aim of this review is to assess the adequacy of educational programs in meeting the present and future needs of Saskatchewan students.

Within the province, the Minister of Education is responsible for the continuing assessment, development and revision of courses of study, authorization of textbooks, the recommendation of other instructional materials, and the provision of a variety of support services for the implementation, monitoring and delivery of educational services in elementary and secondary schools.

Two major policy documents and a long standing curriculum development process direct the work of the Department of Education.

At the Division I, II and III level is "A Plan for the Reorganization of Instruction for Saskatchewan Schools (1963)." This plan describes education as being concerned with the total development of children and youth. The school's role is defined primarily in the area of intellectual development. In recognition of different rates of development, the concept of grade is abandoned in favor of continuous progress. Under this system, grade failure should not occur.

To facilitate implementation of continuous progress principles, the 12 years of schooling are divided into four

divisions. Grouping within each classroom is encouraged and units of work are used as a measure of progress. Furthermore, the policy strongly emphasizes that, "The extent to which a school discovers and provides for the individual needs of its students determines the adequacy of its programs."

At the Division IV level, the policy document is entitled "Program Policies (1975.)" This set of policies specifies the number of compulsory subject requirements, allows considerable freedom of choice of electives, and eliminates rigid tracks and streams. Emphasis is placed upon intellectual growth within the context of sound physical, emotional, moral and social growth.

Curriculum development is a provincial concern, but locally modified or developed courses may be authorized by the Minister of Education. Membership on provincial curriculum committees typically comprises teachers, university professors, trustees, and school administrators, with a departmental co-ordinator or curriculum developer.

A variety of concerns have been expressed regarding present courses of study. It is therefore timely to undertake a review of departmental policies and procedures relating to curriculum and instruction, with particular reference to the role of the department, and the relationship between the department and local education authorities.

An advisory committee has been formed to assist with the review. A number of research projects will be commissioned and opportunity will also be provided for widespread teacher

and community involvement. It is anticipated that a final report will be prepared for submission to the Minister of Education by the fall of 1984.

As a contribution to this important review, the graduate students enrolled in Educational Administration 821B (Concepts of Organizational Theory) at the University of Saskatchewan, undertook a limited research project during the period January - April 1982. The findings of the research project are presented in this report.

The report is organized into five sections. First, the focus of the project is outlined. Second, a review of relevant literature is presented. Third, the conceptual framework for the study is presented together with the methodology adopted. Fourth, the findings of the study are presented. Finally, the findings are discussed and a number of recommendations are presented.

Focus of Project

The project focussed on the role played by the school principal in implementing curricula at the school and classroom level. Implementation may be defined as "alterations from existing practice to some new or revised practice (potentially involving materials, teaching, and beliefs) in order to achieve certain desired learning outcomes" (Fullan and Park, 1981, p. 10).

There is general agreement in the literature that effective implementation of new curricula is a complex and demanding task. There is also agreement that the role of the principal

in influencing change at the school level is of crucial importance. Our aim in this project, therefore, was to explore further the role of the principal in curriculum implementation in Saskatchewan schools.

Two primary questions guided our study:

1. What do principals perceive as their role in curriculum implementation? (i.e. an attempt to gather information on *existing practice*)

2. What do principals perceive as desirable for curriculum implementation? (i.e. an attempt to discover whether *improvements to existing practice* might usefully be made)

Review of Related Literature

Implementation Process

Prior to 1970, most of the research on the process of curriculum change dealt with the best ways to ensure diffusion and adoption of innovations (Rogers, 1962). Effective implementation, or changing practice at the classroom and school level in regard to a new program, was taken for granted; it was assumed that once teachers had accepted a new curriculum or teaching strategy, implementation would automatically follow. However, some writers (Gaynor, 1975, Owens and Steinhoff, 1976, Charters and Pellegrin, 1972) have stated that more emphasis should be placed on the organizational constraints in the school setting, when considering how change occurs, rather than emphasizing the role of the individual in adopting an innovation.

Gross, Giacquinta, and Bernstein (1971) argued that implementation as a process had been neglected and they con-

ducted a case study to examine the ways that processes involved in implementation were important to a successful change effort. They found that organization members who were initially in favor of the innovation encountered obstacles during the implementation process which eventually caused them to become negative towards the change. This finding led to a change in the focus for research on implementation so that change efforts in organizations such as schools were studies in terms of the factors related to successful implementation. A number of studies ensued (Fullan and Pomfret, 1975; Fullan and Pomfret, 1977; CERI, 1973; Gaynor, 1975, p. 15; Rand Corporation, 1975; Fullan and Park, 1981). These studies have provided a more detailed explanation of the process of implementation and the factors essential to its success.

The Role of Administrators

Various writers have suggested that the principal, as the school's supervisor of change, can play an important part in ensuring the success or failure of these efforts. Owens and Steinhoff (1976) state: "The central figure in planned change is the administrator. Few efforts to change significantly the course of organizational events will succeed over his opposition or in the face of his indifference" (p. 151-152). Baldridge and Burnham (1975) discovered that administrators played an important boundary role function as well as being perceived as initiators of change. They also suggested that there was little incentive in the teacher career line to promote adoption of innovations. Fullan (1979) suggested

that the administrator plays a facilitating function by having a working knowledge of the change process, by removing obstacles to progress, and by developing strategies to assist progress.

After reviewing five case studies, Herriott and Gross (1979) stated:

> leadership of high quality is needed if an organizational change effort is to succeed. What is required are administrators who can give leadership to the following tasks: identifying basic problems of their schools, determining their contributing factors, selecting or developing innovations that are "on target", designing and implementing efficient and effective change strategies, incorporating the innovations into their organizations and assessing their effects. Once the decision to introduce an innovation is made, the tailor-made strategy these officials develop to implement it needs to reflect a hard-headed assessment of the matrix of forces in and outside of their school that could block the innovation at different stages of the change process. It also needs to specify courses of action to overcome obstacles if they arise. (p. 41-42)

Fullan and Park (1981) developed a chart (see Appendix A) which delineates the active role which the administrator should play in the change effort. Leithwood, Holmes and Montgomery (1979) concluded:

> The administrator is involved in classroom innovations by virtue of (a) control over resources (Hanson, 1976), (b) opportunity to establish teaching norms (Stephens, 1974), and (c) relationship to the primarily non-classroom sources of rewards potentially available to the teacher. This involvement is likely to be one in which the administrator acts as a gatekeeper for resources, norms and rewards, a function clearly understood by most teachers. Berman and McLaughlin (1976) and Leithwood and Clipsham (1976) found that the expressed attitudes of administrators were used as signals by teaching staff about how seriously they should take the objectives of an innovation project. (p. 55)

The evidence accumulated from these studies and others

(Trump and Georgiades, 1977, Chesler, Schmuck and Lippett, 1963), indicates a direct relationship between principal behaviour and successful curriculum implementation at the school level.

Conceptual Framework

The review of literature suggests that the principal has an important role to play during the implementation of new curriculum. For this reason, we have chosen to focus on the principal's role during curriculum implementation, and specifically on what principals themselves identify as their role. To do this we have adapted the framework developed by Fullan and Park (1981) (see figure 1).

Factors Affecting Implementation

Following is a brief explanation of the factors identified as being significant during the implementation process.

1. Characteristics of the innovation. "The need for change, the lack of a clear, practical picture of the discrepancy between current practice and what is proposed, and the development and acquisition of quality materials constitute one major set of barriers to implementation" (Fullan and Park, 1981, p. 16). Fullan and Park (1981) state that a process needs to be developed which addresses these factors, specifically by interaction with people who are involved in the change.

2. Characteristics of the school system. Prehistory, a teacher's positive or negative experiences with past changes may have an effect on any desired future change. Other fact-

Figure 1: Model of factors influencing curriculum implementation. Adapted from Fullan and Park, 1981, p. 14.

1. CHARACTERISTICS OF THE INNOVATION OR REVISION

   1.1 Need for the change
   1.2 Clarity, complexity of the change
   1.3 Quality and availability of materials

2. CHARACTERISTICS OF THE SCHOOL SYSTEM

   2.1 History of innovative attempts
   2.2 Expectations and training for principals
   2.3 Teacher input and professional development (in-service, technical assistance)
   2.4 Board and community support
   2.5 Time line and monitoring
   2.6 Overload

3. CHARACTERISTICS OF THE SCHOOL

   3.1 Teacher/teacher relations and actions

4. FACTORS EXTERNAL TO THE SCHOOL SYSTEM

   4.1 Role of the Department of Education and other educational agencies

ors at the system level include (1) whether or not principals have been trained by the system to take responsibility for facilitating implementation; (2) whether a mechanism was developed which obtained *teacher input* about the need for change; (3) whether in-service for teachers was present before the change and during it to handle implementation problems; (4) whether parental and board support was sought; (5) whether an implementation plan was developed which allows a sufficient amount of time for the change to occur, as well as provision for a monitoring system which could be used to address implementation problems; and (6) whether steps were taken to ensure that teachers do not experience *overload* problems by being involved in simultaneous implementations of several curricula.

3. Characteristics of the school. Fullan and Park (1981) also state that teachers need opportunities for consultation and small-group interaction with other teachers during the process of implementation.

4. Factors external to the school system. "Implementation has received varied and inconsistent attention by Ministries of Education over the past 15 years; ... many new guidelines were produced for implementation in too short a time, with little support provided." (Fullan and Park, 1981, p. 21) For this reason it is important to study the role of the Department of Education in order to see how it impinges on the implementation attempt.

The overall focus for the study is upon the principal's actions in curriculum implementation. The next section of

the report outlines the methodology used in the collection and analysis of data.

The Research Methodology

To obtain the data required, it was decided to conduct a number of personal interviews with principals of Saskatchewan schools. The purpose of an interview is to gather, through conversation, relevant, valid, and reliable information about the topic under investigation.

In order to secure the maximum benefits from the knowledge and insights which a respondent possesses and can potentially contribute to understanding of the problem being researched, Dexter (1970) advocated an approach which he called "elite interviewing" (p. 5). In general, "elite interviewing" can encompass any interview design within which the respondent is given "non-standardized treatment". More specifically, "elite interviewing" is characterized by: (1) stressing the interviewee's definition of the situation; (2) encouraging the interviewee to structure the account of the situation; and (3) letting the interviewee introduce, to a considerable extent, his/her motives of what he/she regards as relevant, instead of relying upon the investigator's notion of relevance.

An interview guide was developed in group discussion and pre-tested with fellow graduate students who were (or had been) principals. The refined interview guide is presented as Appendix B.

Interviews were conducted with principals selected from the principals attending the Principal's Invitational Confer-

ence in Saskatoon on March 8, 1982. These principals were involved in a major study of the school principalship in Saskatchewan, being conducted for the Saskatchewan School Trustees' Association by a research team in the Department of Educational Administration, University of Saskatchewan coordinated by Dr. P.J. Renihan.

The principals to be interviewed were selected, after discussion with Dr. Renihan, to provide a stratified sample (see Table 1).

Seven students interviewed 21 principals for periods ranging from 10 - 45 minutes. The interviews were conducted at various times during the day of the conference at the conference venue, the Saskatchewan Teachers' Federation building in Saskatoon.

The interviews were tape-recorded and subsequently transcribed by senior typing students from Walter Murray Collegiate, Saskatoon. A sample transcript is presented as Appendix C. A simple numbering of the transcripts was used to assure confidentiality.

Analysis of the transcribed data was undertaken in four stages. First, the sample transcript was analyzed and discussed by the full group using the questions outlined in Appendix D. Second, each member of the group then analyzed his/her individual transcripts, again using the questions as a guide. Third, the group reconvened and analyzed all of the varying responses from the principals to the questions. A sample of this data analysis procedure is presented as Appendix E.

Table 1

Characteristics of Principals Interviewed

N = 21

		Pepresentative Number
Sex:	Male	20
	Female	1
Type of School:	K - 12	2
	Elementary	9
	7 - 9	2
	High School	8
Size of School:	Small < 150	3
	Medium 150-500	15
	Large 500 >	3
Experience:	Less than 2 years	4
	More than 2 years	17

The varying responses were initially recorded on a blackboard and discussed by the group. This discussion aimed at identifying general trends and common concerns while ensuring that minority comments were also considered. Finally, the conclusions from the analysis of data were written up by two members of the group and are presented in the next section of the report.

Findings

The analysis of the interviews was conducted in a number of stages described in the methodology section. The findings are presented here following the model in Figure 1 (see p. 8).

1. Characteristics of the Innovation or Revision

1.1 Need for the change. Several principals identified the role of the principal as one of initiating locally-developed curricula. They questioned the suitability of current provincial programs in light of the needs of the students. "My specific role was to identify the needs of the students who were being asked to take subjects that were not suitable ..." is a typical example of the comments that were made. However, there is little evidence that the principals as a group saw identification of needs as a significant role for themselves, particularly for provincially-developed curricula.

1.2 Clarity, complexity of the change. Most principals recognized the degree of complexity of change required, but there was a considerable amount of variation in the degree to which principals became directly involved in the implementation process. This ranged from leaving the responsibility of

implementation up to the individual teachers, to being actively involved in the implementation of new curricula to the extent of taking courses themselves in the subject area where curriculum change was being introduced. There is evidence that principals have a greater degree of commitment to the implementation of locally-developed curricula than to system-wide or provincial curriculum implementation.

1.3 Quality and availability of materials. Some of the principals felt it was their responsibility to evaluate the appropriateness of curriculum materials. Others felt that it was either shared with, or the sole responsibility of the teachers, or a system responsibility. However, the acquisition of materials was considered to be the key to the successful implementation of curriculum by the majority of the principals. Some identified the need for more lead time in order to budget adequately for the acquisition of curriculum materials.

2. Characteristics of the School System

2.1 History of innovative attempts. In terms of previous successful experiences with the implementation of curricula, locally developed programs were viewed positively by most of the principals while the provincially developed programs were seen negatively. Some of the principals had experienced implementation difficulties with provincial curricula due to the perceived inappropriateness of the curriculum or the lack of resources to implement it. Locally developed programs did not suffer these setbacks to the same extent.

2.2 Expectations and training for principals. The principals reported a wide variety of expectations concerning their roles in the implementation process. There was considerable role ambiguity reflected in the range of responses, from "no role" to "very active roles". Almost all of those interviewed saw "facilitating" as part of the principal's role. Principals also perceived the role as one of initiating, evaluating, and monitoring curriculum implementation.

There was little evidence that principals' training provided them with a theoretical background for the process of curriculum implementation and the administrator's role in this process. A few principals recognized their lack of knowledge in this process and identified a need for training.

2.3 Teacher input and professional development. Principals reported several different practices in providing opportunities for teachers to have a part in the curriculum implementation process. These ranged from holding informal meetings over lunch to changing schedules in order to facilitate professional development for teachers. About half of the principals were able to provide opportunities for teachers to meet on an informal basis. A few principals provided a more systematic opportunity for the teachers to be involved. For example, one principal recounted that he keeps his staff abreast of the departmental newsletters that come out in order to generate teacher interest and "pre-planning in respect to meeting the curriculum when it does come."

2.4 Board and community support. It is often necessary to obtain support for the implementation of curriculum from influentials outside of the school for political as well as legal reasons. Although a number of principals did not discuss this role, more than half identified their role as one of obtaining support for curricular implementation from the director and the board, and some included the community as well. This role was felt to be particularly important in obtaining support for locally developed programs or for programs that are of a controversial nature.

2.5 Time line and monitoring. Close to half of the principals interviewed identified a time line as a factor in curriculum implementation. The others did not discuss this subject.

The comments clearly indicated that a sufficient amount of time is necessary to ensure successful implementation. Principals emphasized that time is needed to budget adequately, to acquire program materials, to acquaint teachers with the new curriculum, and to prepare for implementation in the classroom. Specific lengths of time mentioned ranged from three months to more than a year. One principal indicated the time allowed by the department for curriculum implementation was his "pet peeve". He indicated that curricula are often announced in the spring with the expectation of a fall implementation. He says, "This gives us May and June, our busiest months, and the summer to prepare for it."

The majority of the principals in the sample did not

discuss the role as one of monitoring curriculum implementation. Some principals who believe that such a role is appropriate indicated that time was a major factor hindering the successful fulfillment of the role. However, a few principals seemed to be able to overcome this constraint and felt that they could adequately monitor the implementation, a task which they felt was extremely important.

2.6 Overload. Half of the principals discussed the concept of overload and its implication for curriculum implementation. Most of these principals felt that frequently there is a proliferation of new curricula guidelines being introduced simultaneously in the province and their response to the proliferation ranged from shelving to attempts at implementation. A few principals felt that there was no overload. One felt that the department now adequately ensures that the schools do not become involved in too many curriculum changes.

3. Characteristics of the School

3.1 Teacher/teacher relations and actions. A third of the sample did not discuss whether or not they provided for teacher/teacher interaction. However, more than half of the principals perceived that they do provide opportunity for teachers in the school to interact with one another in regard to curriculum implementation. A few were emphatic about their role of facilitating teacher interactions and actively arranging for meetings and in-service.

4. Factors External to the School System

4.1 Role of the Department of Education and other educational agencies. Reactions to the role of the Department of Education and other educational agencies in curriculum implementation were mixed. Approximately one third responded that in their experience the Department of Education is not helpful in curriculum implementation. Another third felt that support was forthcoming from the Department as well as from consultants and other agencies in the system. One third of the principals made no comment on this matter.

Discussion and Recommendations

The data compiled in this study indicates that there are feelings of uncertainty among principals as to the principal's role in the curriculum implementation process. In general, there seems to be no standard frame of reference for them that serves to delineate responsibilities and appropriate implementation procedures. Common concerns and issues do emerge from the study. The following factors appear to warrant further investigation.

Although the principals we interviewed recognized the complex nature of curriculum implementation their comments did not indicate a high level of understanding of the processes involved. Perhaps this can be explained by the general uncertainty of the principal's role in implementation and a possible gap perceived by the principals for training in this area.

1.1 *In our view it is desirable to have the principal's role in curriculum implementation more clearly defined and that this*

clarification should be followed by provision of opportunities for the acquisition of the appropriate skills and knowledge.

1.2 *It is further recommended that curriculum change and implementation theory be incorporated in the pre-service and core programs for students of educational administration.*

The competing pressures on the principal's time were of paramount concern. The relatively short period of time allowed by the Department was a major factor in the time line from the receipt of new curricula to the expected date of implementation. Principals felt that there was insufficient time to become acquainted with the curriculum and to plan for the initiation and follow up activities required. There was a shortage of time during the school day for monitoring the implementation in the classroom. The time factor was particularly acute for those principals who were required to teach a significant part of their time.

2. *It is recommended that the expectations for implementation be more closely aligned with the reality of time available to principals.*

Throughout the study principals expressed much greater support for locally developed programs. Not unexpectedly, they indicated that such programs were implemented with greater ease and effectiveness. Locally developed curricula are seen as having greater relevance to local needs and that involvement enhances committment.

3. *It is recommended that provincial curriculum committees facilitate greater local involvement at all stages of curriculum*

development and implementation.

The Downey study in Alberta in 1975 focused on the new Social Studies program for that province and found that the critical factor in implementation was the teachers' acceptance of new curricula. As Downey (1975) stated:

> The attempt by the 1971 Social Studies program to focus on the teacher as the critical component in program development was admirable and accurate. Our visits to various schools have confirmed for us how important a role the teacher plays in the implementation of new programs. However, it is also evident that most grades four to six teachers visited were ill equipped and lacked the necessary support and resources to effectively carry out the 1971 program. (p. 270)
>
> What came out clearly in this phase of the research was that the teacher made the difference, and that the quality of the difference was dependent on the human and material resources available. (p. 284)

Principals in the current study indicated a similar primacy of the classroom teacher in curriculum implementation and assumed a variety of roles in their relationships with teachers. Some principals served merely as couriers for new curricula, others were facilitators while others were more actively and directly involved with their teachers in the implementation process.

4. *It is recommended that curricula developers include the teacher's role in implementation as part of the curriculum design.*

Principals pointed to the importance of acquiring resources needed to support new curricula. New programs often demand the purchase of materials, additional personnel for planning and monitoring and also inservice for the teachers.

5. *It is recommended that consideration be given to the costs involved and time required for successful implementation and that these factors be taken into account in the budgeting of educational resources in the province.*

Some principals believe that the proliferation of curricula over the past decade, issued both provincially and locally, has created a serious condition of overload. The perception of overload may be attributed in part to the number of curricula, but we believe that a combination of the factors discussed in this report has also contributed to the feeling of overload. The result seems to be an attitude characterized by resignation among principals toward provincial practice concerning curriculum implementation to date. If, indeed, principals are to be key agents in curriculum implementation, efforts must be made to create a more positive disposition toward this responsibility. As Downey (1975) noted:

> Successful implementation is due in part to support provided by school administration. This support is not only financial but philosophical. In the three schools which evidenced the greatest degree of implementation, all of the Social Studies teachers perceived the principal as understanding the valuing and social action orientation of the program. (p. 311)

6. *It is recommended that efforts be directed toward identifying and applying the competencies required of principals to ensure successful curriculum implementation.*

Summary of Recommendations

1. In our view it is desirable to have the principal's role in curriculum implementation more clearly defined and that this clarification should be followed by provision of opportunities for the acquisition of the appropriate skills and knowledge.

1.2 It is recommended that curriculum change and implementation theory be part of the core program for students of educational administration.

2. It is recommended that the expectations for implementation be more closely aligned with the reality of time available to principals.

3. It is recommended that provincial curriculum committees facilitate greater local involvement.

4. It is recommended that curricula developers include the teacher's role in implementation as part of the curriculum design.

5. It is recommended that consideration be given to the costs involved and time required for successful implementation and that these factors be taken into account in the budgeting of educational resources in the province.

6. It is recommended that efforts be directed toward identifying and applying the competencies required of principals to ensure successful curriculum implementation.

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APPENDIX A

OVERVIEW OF MAIN ROLES IN IMPLEMENTATION

M. Fullan and P. Park Curriculum Implementation: A Resource Booklet, 1981, Ministry of Education, Ontario

OVERVIEW OF MAIN ROLES IN IMPLEMENTATION

KEY ELEMENTS	PROVINCIAL	LOCAL JURISDICTION			EXTERNAL
	PROVINCIAL MINISTRY OF EDUCATION	SCHOOL BOARDS	PRINCIPAL ONGOING COOPERATIVE PROCESS	TEACHER	EXTERNAL RESOURCES ROLES
Goals	-Policy statement & guideline development	Set up a process to clarify, acquire or develop local curriculum in relation to the guideline	-continual interpretation of goals with teachers	-identify new materials, teaching style, skills and beliefs	Coordination and development of resources (information and people) to support implementation
Implementation Tasks (Obstacles and Strategies)	-Supplementary resource guideline -Coordinate orientation and review	Develop a system plan to include: 1) identification of external resources, 2) identification/acquisition/development of materials, 3) training of principals, 4) professional development of teachers, 5) communication network for information gathering and sharing	-develop school priorities, plans and action with teachers regarding existing practice, needed materials, PD, implementation & program review. Plan for teacher release time, scheduling to allow groups of teachers to interact	-teacher-teacher, and teacher-principal planning for implementation, PD -assess current student performance	Compilation and development of curricular guides and materials to be made available (faculties of ed., local boards). RDPC to do inventory and development of personnel and programs for PD in relation to implementation support (faculties of ed., OTF, OISE
Timing and Monitoring	-Set provincial time line for orientation implementation & program review	Establish specific time line for implementation during which time follow-through support and information gathering is systematic	-Set time line for each implementation guideline at school level -Establish agreement with teachers on information assessment system re implementation and student outcomes	-implement change in classroom, and monitor progress. Assess progress in student performance	Program review teams to assess implementation and follow through support (RDPC or other group with diverse membership - Ministry, faculties of ed., OTF, local boards, OAEAO

Personnel	Ministry staff, secondments	Analyze and allocate personnel needs especially release time, secondments, PD leaders	Identify possible external to school personnel to assist in implementation (boards, consultants, fac. of ed., resource people	Participate with teachers & principal to identify external materials & resource people	Ministry regional & provincial faculties of ed., OISE, OTF, OAEAO
Finance	Provide resources for above activities	Establish budget which supports above activities	-School budget allocation -Obtain external resources (materials, technical assistance)	With principal	Multiple sources

APPENDIX B

INTERVIEW GUIDE

The introduction of the interview included an explanation of two terms:

Implementation - changing practise at the classroom and school level in regard to a new program or policy; alterations of existing practise to some new or revised practise (potentially involving materials, teaching or beliefs) in order to achieve desired learning outcomes.

Curriculum - the course of study prescribed for grades K - 12 by the Department of Education in the province of Saskatchewan.

The following questions were asked during each interview:

1. Please describe the procedures used in your school when a new curriculum arrives.
2. What general procedures are you involved with in the implementation of a curriculum in your school or Are there any other things that you do to help the process along?
3. Tell me about a successful/unsuccessful curriculum attempt.
4. What factors do you see contributing to the success or failure?
5. What things would you like to see done differently?

APPENDIX C

SAMPLE OF TRANSCRIBED INTERVIEW

Interview Transcript - Number 2

Interviewer: The interviews and the results of interviews will be strictly confidential. The first thing we are interested in is if you could describe for me the procedures used in your school when a new curriculum arrives.

Principal: Well, when the new curriculum arrives, naturally the director is usually the first one to receive these. We usually get them either a day or a couple of days afterwards. It's been quite a while since a new curriculum has arrived, that we have talked about implementing from the department. By the same token we have initiated curricula from our end and sought approval from the department. So, if you can say arriving, then we look at it in two senses. One, it comes from the province and secondly it arises from inside the school. I should go about perhaps, to one of the last new introductions into the school and that is a number of years ago when we were looking, say, at the industrial arts. Now this is running back pretty well ten years now. Prior to that there was no industrial arts program and we looked at the situation and we felt that there were a number of students whose needs were not being met in the school and consequently, we decided we would have to do something for them. The director and the board discussed this at their level. The director discussed it with me and with the teaching staff at our level and it was felt that industrial arts would suit a purpose in meeting the needs. Essentially from there it was relatively straight forward. We approached the people at the department who handed us over to the provincial consultant for industrial arts. He came down to meet with us. We met, that's the director, myself, and the consultant and discussed first of all any requirements; both physical plant, machine set-up, and all the other kinds of things that we would need to implement the program. Once this had been discussed, then of course, departmental approval had to be gained for this course to be introduced. This was fairly rapidly obtained I must say and I presume it was because the department was already quite familiar with the set up in other situations. So, it really didn't receive, or at least there wasn't a great deal of hold up on time and it was a matter then of building the facility or moving into part of the present structure where the industrial arts facility could be housed. From then on, of course, we had to look at the whole situation of which students would choose industrial arts as an optional course, the grades in which it would be offered, the different activities that would be involved in the different grade levels and so on. So essentially as soon as all of that had been looked at, the board approved on the recommendation of the director, the department approved, and from there we just went into it (pause) hired a teacher who instituted the new program.

Interviewer: With that particular program it was originated at the school level and went out to ...
Principal: Well, the idea for the program was originated at the school level but curricula I think already existed or were in process of being developed at the departmental level.

Interviewer: Could you isolate your specific role within this. You were talking a lot about "we" as a team.
Principal: My specific role I suppose was to identify that the needs of certain students were not being met. They were being asked to take subjects for which they were not suited, or which they were not capable in, which they had no interest and we felt that here was one in particular where the needs meet demands. We did not want to set them up in opposition to or in competition with, say, the technical high school in town because we felt that their offerings were of a unique nature and we simply wanted a fairly general course that I estimated at that time about 20 percent of our students would pick up and that is about the percentage of students who did register for the course. So, once we got the registrations in, we knew that the course was going in, in the fall. Then, of course, we had to build in the usual things like timetable and teacher etc.

Interviewer: You are talking about industrial arts. Do you have any other curricula that you could go back to and examine? What particular factors contributed to the success of the curriculum, or failure?
Principal: Let's take the computer education program which was only introduced last September. So, it is rather new and consequently still in my mind fairly well. We had been looking for a year or two on staff of the possibility of introducing computer ed. (pause) and we have a couple of teachers who are quite well-qualified in this area. I felt as a principal that this is coming into the schools and therefore we had better be ready to meet it, if possible, before it began to arrive in a fairly general way in schools. So, I talked to the director of education about this and broached the subject and he was very, very receptive, in fact, as a director he had been to many meetings at the departmental level and at the local meetings of the directors and superintendents and he could see also at that level that computer ed. was a coming thing. I think he was also convinced in his own mind as an educator that it was inevitable that we get into it, and in fact not only inevitable, but desirable. Then he approached the board and he asked us to do some preliminary work on this because at that time there was no real departmental curriculum for computer ed. We knew that a committee had been struck but they had only had a couple of meetings and even at that time a departmental co-ordinator had not been appointed. I believe one has now, a man from Regina. So, I sat

down with my two staff members who were quite familiar with computers and asked them to develop a type of a program that we might offer for a full credit in Grade Ten with the expectations that somewhere down the road we would look at also a Grade Eleven for one credit. We felt we didn't want to introduce it into Grade Nine. We felt, at the back of our minds, that perhaps elementary schools should be looking at some kind of computer literacy. What happened from there was that the director went to the board and I guess he must have hit them at the right time because the board accepted whole-heartedly his recommendation that the school go into computer science at the Grade Ten level. They also were very generous as regards purchasing the equipment, the hardware. I expected that, for example we are a school of 480, and we expected at the Grade Ten level about 75 students would register for computer science. I expected that the board would perhaps buy us three terminals and maybe a disc drive and, perhaps, a chief printer. In fact, they doubled up on that. They bought us six terminals with video readout, they bought us a double disc drive and they bought us a fairly good quality printer. Now, that was partly in response to my recommendation that there be not more than four students allocated per terminal. We plan to have approximately 18 to 24 students, maximum 24 students in each class. And that is just about what it worked out to. We actually registered 84 students and we gave this option also to Grade Eleven and Twelve students because obviously there had not been computer ed before that time. So we got 84 students registered and we decided to offer it twice in each semester giving an average class size of 21. When the timetable was constructed, naturally it didn't work out exactly at 21 per class, but, I think the highest is 24, and I think the lowest was about 16. So we felt that we had struck a reasonably good balance. Then, at the departmental level since there was no curriculum developed we were asked to submit to the department an outline of what we proposed to do. At the same time the curriculum committee for the province had begun to work on this and it was almost a simultaneous thing. Our proposal from the school arrived at the department and the core curricular committee submitted what they felt was an expectation for curriculum at the introductory level and they more or less coincided. Our course was approved as a locally developed course but they also said that since it was so close to what the curriculum committee of the provincial level was recommending that we really had not needed to submit for a locally approved course.

Interviewer: Just going back to some of the elements that you mentioned that I gather contributed to successful implementation. You mentioned the computer terminals and adequate resource material. You had two teachers on staff that were

interested and qualified in this area. I would gather if you didn't have staff members that were qualified you would have to go a step further and provide inservice.
Principal: That's right. Provide inservice or hire someone with those qualifications.

Interviewer: You also mentioned the superintendent was quite eager and the board became quite interested and gave a lot of support.
Principal: Very much support.

Interviewer: And you supplied your curriculum to the board?
Principal: Yes.

Interviewer: For approval?
Principal: That's right. Our school board approved our submission of our suggestions to the department and it was accepted by the department. In addition I also took a couple of classes at the community college level. I took one last year and I am taking one right now because I feel that I am fairly ignorant and I need to know a little about what's happening and a number of teachers in the school right now have become interested to the point where a dozen of them have asked for a kind of a seminar and are willing to go one hour a week at noon times for about ten weeks to receive some instruction from our two staff members on the computer in education. So, it is catching hold and people are interested and they recognize that here is something we are going to have to deal with to do.

Interviewer: Now going on to curriculum implementation in general. Are there any things about the implementation of curriculum that you would like to see changed or emphasized to improve situations or to standardize the implementation procedure?
Principal: No, I don't really think so. I think curricula have been developed in most areas to my satisfaction so far except for things which are of course brand new and on which work is being done. I am quite happy the way it's done and obviously any time anybody wants to develop a curriculum of their own they have to go through the staffs and I recognize that this is a must because if you are going to get credits granted for implementing a curriculum then it has to be with departmental approval. Otherwise you would have chaos. So I am quite happy with the way it is.

Interviewer: Do you have anything to add about curriculum?
Principal: No, not really. I think this work that Terry McKague is doing right now is very valuable. It is perhaps about time. You know, when you look into a cupboard or on a shelf and you look at curricula in the province (pause) it is getting to be rather vast, a little bit higgledy-piggledy

maybe and certainly I think things need to be pulled together. I am not unhappy with curriculum, but the organization and the access I think has to be improved.

Interviewer: What do you mean by that?
Principal: I'd like to see some kind of a standardized system of even of keeping curricula, you know, we get from the department. Every now and again an envelope with curriculum for this, curriculum for that, and we file them alphabetically and so on, or by subject, whatever and I would like to see the department suggest a particular way of storing these things, even just the physical storing and the availability because in my school I might have them in one particular spot, another school has them somewhere else. I might arrange them in one way, another school does it another way. I'm just not happy with the fact that they are all stuck on a shelf. They are in binders or whatever way you store them and I have a feeling when things get on shelves they stay there.

Interviewer: When these curricula come in an envelope to your office, what is the procedure within your school? Do you have a procedure where you can pass this curriculum to a committee?
Principal: I don't give it to a committee. We are not large enough for departments yet. Fortunately, I usually get enough to keep one for myself and one for each teacher who is involved in teaching that particular subject or area. And, of course, if we don't get enough then we simply write away for more. For example, say in French, the department realizes that we have three French teachers, so if something new in French comes out they usually send me four copies, one for myself and one for each teacher. And, they seem to have a handle on that.

Interviewer: If for example, just going back to French, if something new does come out and then is handed over to the teachers, what do they do with it?
Principal: They naturally have to become responsible for implementation if there is anything different that has to be done or if there is anything that is actually not in there that they feel there should, then they will get back to me and make suggestions.

APPENDIX D

QUESTIONS USED TO ANALYZE THE FACTORS AFFECTING IMPLEMENTATION

Questions Used to Analyze the Factors Affecting Implementation

A. Characteristics of the Innovation or Revision

1. Need for the change:
   a. What was the principal's role in identifying the need for change?

2. Clarity/complexity of the change:
   a. Does the principal have a clear understanding of the degree/complexity of change? (how extensive does the principal perceive the change to be?)

3. Quality and availability of materials:
   a. does principal evaluate the appropriateness (quality) of material?
   b. does principal take steps to ensure availability of material?

B. Characteristics at the School System Level

4. History of innovative attempts:
   a. What are the predispositions of the principal towards curriculum implementation?
      (distinguish) local - single school
      system wide
      provincial

5. Expectations and training for principals:
   a. What is the principal's expectation of his/her role in the implementation process?
   b. What evidence is there of principal's training providing greater understanding of the implementation process?

6. Teacher input and professional development:
   a. What is the principal's role in providing opportunities for teacher input into curriculum implementation?
   b. What is the principal's role in ensuring opportunities for on-going teacher professional development related to curriculum implementation?

7. Board and community support:
   a. What evidence is there that the principal sought/acquired Board and community support?

8. Time line and monitoring:
   a. Does the principal define a time line for implementation?
   b. What role does the principal play in monitoring the implementation of the curriculum?

9. Overload:
   a. Does the principal feel that successful curriculum implementation is jeopardized by overload?

C. Characteristics at the School Level

10. Teacher/teacher relations and actions:
   a. Did the principal facilitate teacher/teacher relations and actions? (e.g. meetings, etc.)

D. Factors External to the School System

11. Role of the Department of Education and other educational agencies:
   a. How does the principal relate to the Department of Education and other educational agencies?

APPENDIX E

SUMMARY OF RESPONSES TO QUESTIONS DERIVED FROM CURRICULUM IMPLEMENTATION MODEL

Summary of Responses to Questions Derived from Curriculum Implementation Model

Sample Question

Question No. 5 a. What is the principal's expectation of his/her role in the implementation process?

Case Number	Response
1	Emphasizes extensive involvement in the implementation of curricula that he has played a role in the initial stages of development.
2	Extensive involvement in locally developed curricula
3	Involvement with budgeting, resource acquisition and risk diffusement
4	Acts as facilitator and acquires resources
5	This is mainly the teacher's role
6	Strongly identifies with implementation as part of his role
7	No expectation for himself. It is the teacher's role.
8	Role is to involve the teachers. It is the primary responsibility of the teachers.
9	Extensively involved in curricula relating to his own subject specialization. Other teachers involved with other curricula.
10	Provides resources and alleviates teacher stress.
11	Acts as facilitator and acquires resources.
12	Involved in monitoring, checking and follow-up.
13	Acts as facilitator.
14	Plays a very active role. Defines detailed steps, a systematic approach described.
15	Acts as a facilitator and acquires resources.
16	Acts as facilitator, provides for inservice.

17 Together with teachers adapts the curriculum to local circumstances; provides for a step by step orientation process.

18 No role identified; delegates the responsibility to others.

19 Acts as facilitator

20 Responsibility of implementation given to curriculum committee and school system

21 No role identified.